

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 47-63 are pending in the application, with claims 47, 53, and 56 being the independent claims. Claims 1-46 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 47-63 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objections to the Drawings

In the Office Action, the Examiner objected to the drawings for allegedly failing to show various features. Paper No. 9, page 2. Although Applicants respectfully disagree with the Examiner's objections, these objections nonetheless have been rendered moot and/or invalidated by the foregoing amendment. Therefore, Applicants respectfully request reconsideration and withdrawal of these objections.

Rejections under 35 U.S.C. § 112

In the Office Action, the Examiner rejected claims 1-44 as allegedly being indefinite under 35 U.S.C. § 112, second paragraph. Paper No. 9, pages 2-4. Although Applicants respectfully disagree with the Examiner's rejections, these rejections nonetheless have been rendered moot and/or invalidated by the foregoing amendment.

Therefore, Applicants respectfully request reconsideration and withdrawal of these rejections.

Rejections under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1, 19-20, 26-29, and 45 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 4,871,683 to Harris *et al.* (herein referred to as "Harris"). Paper No. 9, page 4. The Examiner also rejected claims 1-3, 9, 19-21, 28, and 45 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 5,106,583 to Raysberg *et al.* (herein referred to as "Raysberg"). Paper No. 9, page 5. Although Applicants respectfully disagree, these rejections nonetheless have been rendered moot and/or invalidated by the foregoing amendment.

As discussed above, Applicants seek to add new claims 47-63, which recite features, elements, and/or limitations not disclosed in either Harris or Raysberg. For example, independent claim 47 recites:

47. An apparatus for **synthesizing a polymer**, comprising:
a carousel for rotating step-wise around an axis of rotation;
a plurality of **liquid conduits formed within said carousel**,
wherein each liquid conduit is arranged on a radius with respect to said axis; and
a plurality of reaction mounts removably insertable onto said plurality of liquid conduits, wherein each liquid conduit forms a chamber below a corresponding reaction mount, wherein each reaction mount is adapted to receive at least one of a plurality of **reagents for synthesizing the polymer**.

Independent claim 53 recites:

53. An apparatus for **synthesizing a polymer**, comprising:
a carousel having a plurality of reaction mounts coupled to a first side and a plurality of exit ports protruding from a second side, wherein each exit port communicates with a corresponding reaction mount adapted to receive at least one reagent from a plurality of **reagents for synthesizing the polymer**; and
at least one engagement port positioned under said carousel, wherein said at least one **engagement port is raised or lowered to engage or disengage with at least one of said plurality of exit ports**, wherein said at least one engagement port is connected to a vacuum line adapted to drain liquid from the engaged exit port.

Independent claim 56 recites:

56. An apparatus for **synthesizing a polymer**, comprising:
a carousel having a plurality of reaction mounts removably insertable onto a plurality of liquid conduits, wherein each **liquid conduit forms a chamber** below a corresponding reaction mount; and
a plurality of work stations positioned above said carousel, wherein **each work station performs a physical step in a series of physical steps for synthesizing the polymer**.

Referring to the documents cited by the Examiner, neither Harris nor Raysberg teach “synthesizing a polymer” as recited in Applicants’ independent claims 47, 53, and 56. On the contrary, Harris describes a system and method for performing a clinical assay (Col. 3, lines 10-16), and Raysberg describes a protein analysis apparatus that hydrolyzes a protein and then derivatizes the resultant amino acid (Col. 4, lines 6-9; and Col. 9, lines 31-38).

Since Harris and Raysberg do not describe “synthesizing a polymer,” it necessarily follows that neither document describes “reagents for synthesizing the

polymer” or “a plurality of work stations” wherein “each work station performs a physical step in a series of physical steps for synthesizing the polymer.”

Furthermore, regarding Applicants’ claims 47 and 56, the “turntable 12” described in Harris and the “rotating turret 19” described in Raysberg do not include “liquid conduits” as recited in Applicants’ invention.

Additionally, regarding Applicants’ claim 53, neither Harris nor Raysberg describe an “engagement port positioned under a carousel” that is capable of being “raised or lowered to engage or disengage with...exit ports” of the carousel “to drain liquid from the engaged exit port,” as recited in Applicants’ invention.

The dependent claims (i.e., claims 46-52, 54, 55, and 57-63) depend from independent claims 47, 53, and 56. Therefore, they are patentable over Harris and Raysberg for at least the reasons stated above, in addition to the additional features, elements, and/or limitations recited therein. Accordingly, for the reasons stated above, Applicants respectfully request consideration and allowance of the claims sought to be added by the foregoing amendment.

Rejections under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 4-8, 10-18, 22-27, 29-44, and 46 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Raysberg in view of U.S. Patent No. 5,472,672 to Brennan (herein referred to as “Brennan”). Paper No. 9, page 6). Although Applicants respectfully disagree, these rejections nonetheless have been rendered moot and/or invalidated by the foregoing amendment.

As discussed above, Applicants seek to add new claims 47-63, which recite features, elements, and/or limitations not taught or suggested by Raysberg or Brennan, taken alone or in combination. As discussed above with reference to the Examiner's rejections under 35 U.S.C. § 102(b), Raysberg fails to teach or suggest, *inter alia*, "synthesizing a polymer", "liquid conduits", and engagable/disengagable "engagement ports." It should be noted that Brennan fails to cure the defects of Raysberg since it likewise fails to teach or suggest, *inter alia*, a "liquid conduit formed within a carousel" and engagable/disengagable "engagement ports."

Therefore, Applicants respectfully assert that claims 47-63 are patentable over Raysberg and/or Brennan for the reasons stated above. Applicants respectfully request consideration and allowance thereof.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "K. Patterson", with a long horizontal flourish extending to the right.

Kendrick P. Patterson
Attorney for Applicants
Registration No. 45,321

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600